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College of Dentistry



Photographical Analysis of Macro- and Micro-aesthetic Appearance in a Sample of Iraqi Adults with Class I Normal Occlusion (A Cross-Sectional Study)

A Thesis

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Abstract

Generally, the facial aesthetics depends on the aesthetic appearance of the maxillary anterior teeth. The aims of this study were to analyse the macro-aesthetic appearance of the face and micro-aesthetic appearance of the maxillary anterior teeth to establish a normative values for class I skeletal and dental relation and investigate the relationship between facial measurements and width of maxillary anterior teeth and mesiodistal width of each maxillary anterior tooth.

The sample consisted of 120 Iraqi adults dental students (60 males and 60 females) with an age ranged between 18-23 years. Each individual was clinically examined according to the specific criteria. The photographic records were taken with cephalostat based head position, frontal facial and intraoral photographic records were performed for each subject by using digital camera that fixed in position with height adjustable tripod; the facial (five horizontal and four vertical distances) and dental measurements were measured by using AutoCad program 2014.

Descriptive statistics were obtained for facial and dental measurements, the mean values were generally higher in males than in females for facial and dental variables, whereas the independent samples t-test showed a high significant gender difference in most of facial variables, and a non-significant gender difference in most of dental variables, additionally, there was a non-significant side difference in most of the measured dental variables in male group, and significant side difference in most of the measured dental variables in female group. Pearson's correlation coefficient was obtained to test the relation between the facial and dental measurements, a non-significant correlation was obtained between most of the measured facial and dental variables.

The present study found that the gender differences were significant in macro- aesthetic appearance (facial measurements) with males having larger facial

measurements than females, while the gender had a non-significant effect on the micro-aesthetic appearance (maxillary anterior teeth proportions), on the other hand asymmetry between the right and left side was found in most of the dental measurements, and weak correlation was obtained generally between facial and dental measurements.